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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/247,418	02/10/99	EGGERS	H MO-5041/WW-5

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EXAMINER

AHMED, S

ART UNIT

PAPER NUMBER

1773

DATE MAILED:

08/14/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/247,418

Applicant(s)

Eggers et al.

Examiner

Sheeba Ahmed

Group Art Unit

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- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-30 _____ is/are pending in the application
- Of the above, claim(s) _____ is/are withdrawn from consideration
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-30 _____ is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☒ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 11, 13, 14, 18, 19, 21 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 is dependent on claim 1 and further recites that the “structure consists of an outer ply (b) and at least one inner ply (I)”. The above recitation is ambiguous since the claim recites the transitional phrase “consists of” (which excludes any element, step, or ingredient not specified in the claim) but further recites the laminate has *at least one* inner ply (I). For purposes of examination, the Examiner interprets the above claim to recite a laminate having an outer ply and an unlimited number of inner plies.

Claims 13 and 14 recite a Markush group wherein the first or second polymeric resin “comprises at least one member selected from the group consisting of ethylene/vinyl acetate copolymer,low density polyethylene, high density polyethylene, copolymer of ethylene and α -olefin having at least 3 carbon atoms”. The Examiner recommends adding the word “and” between the last two members of the Markush group, i.e., between the terms “low density

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polyethylene” and “copolymer of ethylene and α -olefin having at least 3 carbon atoms”. A similar ambiguity exists in claims 18, 19 and 21.

Claim 26 recites a Markush group stating that the “substrate is selected from the group consisting of metal, cardboard,woven fabric plastic and composites thereof”. The Examiner recommends adding a comma between the terms “woven fabrics” and “plastic”.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13, 17, 19, 25-27, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP403197137A.

JP403197137A recites a heat shrinkable laminated film (*equivalent to the composite film of the claimed invention; as recited in claim 25*) having a heat seal layer laminated onto a polyamide film (*equivalent to the substrate of the claimed invention*) via an anchor coat layer. The heat seal layer comprises an inner layer (*equivalent to the inner ply of the claimed invention*) composed of LDPE (*inherently having a density between 0.91 and 0.935 g/cm³; as evidenced by The Encyclopedia of Polymer Science and Engineering and thus meeting the*

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limitations of claim 19), EVOH, or ionomer and an outer layer (*equivalent to the outer ply of the claimed invention*) composed of LLDPE (*inherently having a MFR of 0.1 to 3g/10 min.; as evidenced by The Encyclopedia of Polymer Science and Engineering*) or EVOH wherein the outer layer constitutes an outer surface (*thus meeting the limitations of claim 30*).

JP403197137A discloses the claimed invention but does not specifically state that the MFR of the inner ply is greater than the MFR of the outer ply, the weight/area of the inner ply is at least 40% of the weight/area of the laminate or that the outer layer has a thickness of 5-50 microns.

However, the Examiner takes the position that it would have been obvious to one having ordinary skill in the art to have determined the optimum MFR and weight/area of the inner ply and the optimum thickness of the outer ply through routine experimentation in the absence of a showing of criticality in the claimed sizes. Furthermore, with regards to the limitation that the inner ply includes two plies, the Examiner takes the position that it is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. (US 5,759,675).

Hamada et al. disclose an oriented multilayer film having an intermediate layer (*equivalent to the inner ply of the claimed invention*) comprising a mixture of two kinds of LLDPE (*one having a density of 0.915-0.935 g/cm³ and a melt index of 0.1 to 1.5g/10minutes and the other having a density of 0.890- 0.920g/cm³ and a melt index of 0.3 to 7g/10minutes*) (*thus meeting*

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the limitation that the MFR of the inner ply is three times the MFR of the outer ply) wherein the LLDPE are copolymers of ethylene and one or more α -olefins having 3-20 carbons including butene and 4-methyl-1-pentene, and inner and outer layers (*equivalent to the outer ply of the claimed invention*) of a mixture of a high pressure process polyethylene (*having a density of 0.917-0.935 g/cm³ and a melt index of 0.3 to 7g/10minutes*), an ethylene- α -olefin copolymer wherein the α -olefin has 3-20 carbons and includes butene and 4-methyl-1-pentene (*having a density of 0.870-0.900 g/cm³ and a melt index of 0.1 to 20g/10minutes*) and 10-30 wt.% of LLDPE (*having a density of 0.890- 0.920g/cm³ and a melt index of 0.3 to 7g/10minutes*) (*i.e., in an amount up to 50% by weight; thus meeting the limitations of claim 21*) (Column 2, lines 2, lines 55-63). Hamada et al. disclose the claimed invention but does not specifically state that the weight/area of the inner ply is at least 40% of the weight/area of the laminate or that the outer layer has a thickness of 5-50 microns. However, the Examiner takes the position that it would have been obvious to one having ordinary skill in the art to have determined the optimum weight/area of the inner ply and the optimum thickness of the outer ply through routine experimentation in the absence of a showing of criticality in the claimed sizes. Furthermore, with regards to the limitation that the inner ply includes two plies, the Examiner takes the position that it is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

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4. Claims 1-13, 17, and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heilman et al. (US 5,783,269).

Heilman et al. disclose a heat sealable, multilayer film *(equivalent to the composite film of the claimed invention; as recited in claim 25)* comprising an outer layer *(equivalent to the substrate of the claimed invention)*, one central layer, a supporting layer *(equivalent to the inner ply of the claimed invention)* and a heat sealing layer *(equivalent to the outer ply of the claimed invention)* (Column 1, lines 6-13) wherein the central layer is at least 90 microns thick, the outer and supporting layers are each 10-20 microns thick and the heat sealing layer is 15-30 microns thick *(thus meeting the limitations of claims 8-10)* (Column 4, lines 11-13 and 43-45). The outer layer may be HDPE, an ethylene copolymer or polypropylene *(thus meeting the limitations of claims 26 and 27)*; the central layer may be polyethylene copolymers and LDPE; the supporting layer may be HDPE *(inherently having a MFR between 0.01 to 100g/10 min; as evidenced by The Encyclopedia of Polymer Science and Engineering and thus meeting the limitations of claim 13,)*, LLDPE and or blends of theses and the heat sealing layer may be HDPE *(thus meeting the limitations of claims 26 and 27)*, LLDPE or blends thereof (Column 5, lines 24-59). Heilman et al. disclose the claimed invention but does not specifically state that the MFR of the inner ply is greater than the MFR of the outer ply or that the weight/area of the inner ply is at least 40% of the weight/area of the laminate. However, the Examiner takes the position that it would have been obvious to one having ordinary skill in the art to have determined the optimum MFR and weight/area of the inner ply through routine experimentation in the absence of

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a showing of criticality in the claimed sizes. Furthermore, with regards to the limitation that the inner ply includes two plies, the Examiner takes the position that it is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

5. Claims 1-13, 15, 16, and 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaschel et al. (US 5,885,707).

Kaschel et al. disclose a sealable laminated film (*equivalent to the laminate of the claimed invention*) containing a copolymer (i.e., MPE copolymer) of ethylene and α -olefin with more than 3 carbons such as butene, hexene or 4-methylpentene, wherein the copolymer is polymerized with a metallocene catalyst, has a melt index MPR of 0.5 to 10g/10min, a molecular weight distribution of less than 3 and a crystallite melting point of less than 100°C (*thus meeting the limitations of claims 13, 15, 16, 20-22*)(Column 4, lines 40-50). The film can be built up from one or more layers wherein the MPE copolymer is contained within the sealing face (*equivalent to the outer ply of the claimed invention*). In the films having more than one layer, the sealable face is adhered to one or more thermoplastic layers (*equivalent to the inner ply of the claimed invention*) (Column 4, lines 58-64). The film thickness falls within the 10-150 microns (*thus meeting the limitations of claims 8-10*) and the film may contain additives such as slip additives, antistatic agents, and colorants (*thus meeting the limitations of claim 23*) (Column 5, lines 32-50). The film may be LDPE, EVA or mixtures thereof (Column 6, lines 9-

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14). The film may be laminated to a substrate *(equivalent to the composite film of the claimed invention; as recited in claim 25)* such a polypropylene, oriented polyethylene terephthalate, polyamide or polycarbonate *(equivalent to the substrate of the claimed invention)* (Column 6, lines 14-24). Kaschel et al. disclose the claimed invention but does not specifically state that the MFR of the inner ply is greater than the MFR of the outer ply or that the weight/area of the inner ply is at least 40% of the weight/area of the laminate. However, the Examiner takes the position that it would have been obvious to one having ordinary skill in the art to have determined the optimum MFR and weight/area of the inner ply through routine experimentation in the absence of a showing of criticality in the claimed sizes. With regards to the limitation of claim 24, the Examiner takes the position that it would have been obvious to add the recited fillers given that Kaschel et al. specifically state that colorants may be added to the film and the recited fillers are known colorants or opacifiers. Furthermore, it would have been obvious to one having ordinary skill in the art to have determined the optimum amount of the fillers through routine experimentation in the absence of a showing of criticality in the claimed amount.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Sheeba Ahmed whose telephone number is (703) 305-0594. The Examiner can normally be reached on Monday-Thursday from 8am to 6pm.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Paul Thibodeau, can be reached at (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5436.



Sheeba Ahmed
August 10, 2000



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700